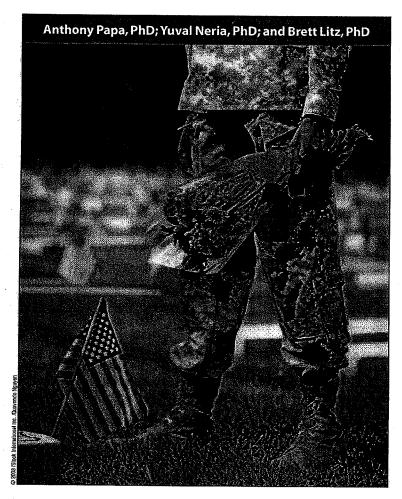
Traumatic Bereavement in War Veterans



686 | PsychiatricAnnalsOnline.com

ore than a million men and women have been deployed to Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) since the beginning of these conflicts. Recent studies show that loss of fellow service members to death or debilitating injuries is a major hazard. Hoge and colleagues reported that 68% of service members saw dead or seriously injured Americans, and 86% knew someone who was seriously injured or killed.1 The majority of these service members will not develop lasting mental health problems as a result of the dual burden of loss and exposure to potentially traumatic events, but a salient minority will develop persistent problems.

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PSYCHIATRIC ANNALS 38:10 | OCTOBER 2008

To date, explanations of the lasting biological and psychological sequelae of combat have been predominated by fearconditioning models.² Unfortunately, the unique lasting impact of combat losses are overlooked or subsumed under the posttraumatic stress disorder (PTSD) construct.^{3,4} Yet in the past 10 to 15 years, clinical scientists have determined that certain losses can result in a unique and debilitating mental health syndrome. which we will refer to as complicated grief (CG),5 CG, which has also been named traumatic grief⁶ or prolonged grief disorder,7 is associated with significant suffering, functional impairment, and morbidity, 4,5,7,8 with indications that, once individuals develop CG, they are at substantial risk for chronic problems that are resistant to treatment.9 Studies have repeatedly shown that CG is associated with increased frequency of PTSD, depression, functional problems,4 hospitalization for mental illness, 10 suicidality, 11 medical comorbidity, such as cancer,12 cardiac events and high blood pressure,13 and mortality.14 Further, our previous work with traumatic loss due to terrorism^{3,4,15} or combat in Israel^{16,17} suggests that loss from a violent death may be associated with more severe CG. In this article, we examine evidence for the existence of CG in war veterans, explore the impact this has on the mental health and fitness of these service members, and discuss the implications for treatment.

COMPLICATED GRIEF

Grief is a universal experience that involves intense emotional response to loss of a close or intimate friend or family member that is typified by sadness, longing, and anger. Normal grief is common in the first weeks and months after loss, may be intense at times, and is often accompanied by somatic, depressive, and PTSD symptoms. Yet symptoms of normal grief typically remit well within 6 months of a loss. The majority of bereaved are able to accommodate to loss and regain function-

ing. ¹⁸ However, a salient minority of individuals develop persistent CG, which is manifested by chronic mourning, yearning, rumination, loneliness, loss-related anguish, and withdrawal. ^{19,20}

Simon et al found that
32% of a midlife, civilian
clinical sample that met
criteria for a CG diagnosis from
a clinical interview did not
display a comorbid MDD or
PTSD diagnosis.

Although not included in the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV), research is accumulating to support the construct validity for a CG. Also, there is accumulating expert consensus regarding the core features for CG, 19,20 and it is being considered for inclusion in the upcoming DSM-V. The proposed symptoms of CG include the following: 1) constant longing, yearning or pining for the lost person, 2) intrusive thoughts about the deceased, and/or 3) intense feelings of emotional pain, sorrow, or pangs of grief related to separation distress, along with five of the following; a) avoidance of reminders of the loss, b) feeling stunned, shocked, or dazed by the loss, c) confusion about role in life or a diminished sense of self, d) trouble accepting the loss, e) difficulty trusting others since the loss, f) feelings of bitterness and anger over the loss, g) difficulty moving on (eg, making new friends, pursuing new interests, h) feeling emotionally numb since the loss, and i) feeling that life is unfulfilling, empty, or meaningless without the deceased.7 Also in the proposed criteria, diagnosis requires persistent severe grief symptoms, which do not remit after the first 6 months of the loss, and which interfere with functioning. Because CG is associated with considerable morbidity (eg, depression, suicidal ideation, high blood pressure), adverse health behaviors (eg, increased smoking and alcohol consumption), and quality of life impairments, the costs of unrecognized and untreated CG are high in terms of healthcare costs, lost productivity, suicide, and quality adjusted life years. 7.8.11.13.21

HOW COMMON IS COMPLICATED GRIEF?

Research is relatively scant on prevalence rates of CG and varies according to type of bereavement. There is no research on the prevalence rates of CG from combat. Estimates of disruption vary from 10% following deaths from natural causes,11 20% in bereaved dementia caregivers,22 to 30% to 40% in Alzheimer's caregivers^{23,24} evidencing clinically significant levels of depression. Research on the risk factors specific to CG suggests that insults to secure attachment are central to the disorder's etiology. These risk factors include childhood abuse and serious neglect,25 childhood separation anxiety,26 close kinship relationship to the deceased (eg, parents are the most adversely affected adults),27,28 insecure attachment styles,28 and marital closeness, support, and dependency.²⁸⁻³⁰ Advance preparation for the loss31 as well as having a good social support network32 have been associated with a lower risk for CG. Taken together, these results suggest that bereaved patients with attachment difficulties, and those who feel unprepared before the death and unsupported after it are at heightened risk of CG.

COMPLICATED GRIEF COMPARED WITH DEPRESSION AND PTSD

Research is accumulating to support the construct validity for CG and its core features. 5,15,19 In addition to unique

PSYCHIATRIC ANNALS 38:10 | OCTOBER 2008

risk factors described above, a number of studies have found that grief symptoms (eg, yearning, searching, non-acceptance, ruminating on memories of deceased, loneliness, lack of meaning without deceased) form separate, coherent dimensions from depression symptoms (eg, fatigue, loss of energy, self-blame, depressed mood, loss of enjoyment, worthlessness) with unique outcomes in civilians^{5,15,33-36} and in combat veterans.37 Furthermore, these factors are independently predictive of differential responding to psychosocial35 and psychopharmacological intervention8 in broad-based community samples. Similar differences in constructs have been found between anxiety symptoms (eg, worry, restlessness, anxiety, nervousness) and CG.5,7,33,34

Symptoms of CG and PTSD may co-occur in the event of traumatic loss,3 but avoidance of fear-inducing stimuli associated with psychic trauma does not occur with CG following a death. Rather, there is a hyperfocus on the loss and reminders of the deceased, a desire for reconnection with the deceased, and avoidance of reminders that the person is gone rather than high arousal and negative effect. Additionally, the unique separation distress symptoms of CG. such as longing and pining for the deceased, and interpersonal attachment problems of mistrust of others and difficulty forming new relationships arising from concerns about interpersonal abandonment, are not included among criteria for PTSD,5,19

Simon et al found that 32% of a midlife, civilian clinical sample that met criteria for a CG diagnosis from a clinical interview did not display a comorbid MDD or PTSD diagnosis (51% did not have comorbid PTSD). 9.38 However, they did find that increases in CG were typically associated with increased comorbidity, but when controlling for comorbidity, CG diagnosis was associated with significant, unique functional impairment.

In a similar vein, Neria and Litz tested three hypotheses closely related to this line of research among 704 bereaved friends and family members of 9/11 victims: 1) that exposure to trauma



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will increase the risk for CG among individuals who have experienced loss; 2) that CG will be common not only among family members but also among individuals who have lost friends due to 9/11 attacks; and 3) that CG will predict functional problems above and beyond PTSD and depression.3 This study indicated that exposure to trauma increased the risk for CG twofold as compared with those who experienced loss alone; that more than one-fifth of the subjects that lost a close friend in 9/11 attacks developed CG; and that CG predicted functional problems above and beyond PTSD and depression. Supporting these results, Bonanno et al found that increases in CG symptoms predicted decrements in functioning beyond PTSD

symptoms in a midlife bereaved sample and in a bereaved sample that had lost a family member in the terrorist attacks of September 11, 2001.¹⁵

These findings have important implications for populations involved in combat. Specifically, they suggest that exposure to combat trauma may exacerbate loss-related psychopathology, CG may be highly common among service members who lost close friends, and that CG has incremental validity in predicting functioning beyond PTSD.

COMPLICATED GRIEF AND THE MILITARY

The death toll among American, Iraqi, and Afghan troops is enormous. As of September 5, 2008, there were 4,152 confirmed U.S. deaths in OIF and 582 deaths in OEF reported by the Department of Defense (http://icasualties.org/oif/default. aspx). In addition, the death toll among Iraqi security forces (8,593) and civilians (43,209 since 2005) is very high (http://www.icasualties.org/oef/; These figures are based on news reports. The actual figures are likely to be much higher.)

Perhaps the most well-established indicator of the impact of combat loss on functioning is the link between survivor guilt and poor adjustment postcombat, ^{39,40} and the associated risk for increased suicide. ⁴¹ This is particularly salient since the phenomenon of survivor guilt shares many features with the new diagnostic criteria or CG: yearning, trouble accepting the loss, anger or bitterness about the loss, uneasiness about moving on with life, trouble feeling connected to others, and feeling that there is no meaning future because of the loss. ^{39,42,43}

As previously noted, there is a dearth of population studies that have examined the prevalence of CG in the general population, and no data are available about the prevalence and impact of CG in veterans of OIF/OEF. However, research among Vietnam veterans and Israeli war veterans provides support for

688 | PsychiatricAnnalsOnline.com

PSYCHIATRIC ANNALS 38:10 | OCTOBER 2008

the existence of CG among war veterans from previous wars. For example, Pivar and Field³⁷ found levels of grief symptoms among Vietnam combat veterans to be higher than those found in individuals who had experienced the loss of a spouse. Additionally, these symptoms were directly related to loss of fellow service members in combat, were distinct from PTSD symptoms, and were predicted by the level of attachment to unit members, level of attachment to at least one member of the unit, and the total number of individual losses experienced by each service member.

To confirm the scope and impact of loss among veterans of combat, we examined the National Vietnam Veterans Readjustment (NVVRS) database. Participants were determined to have suffered a loss if they reported having any close personal friends who were killed in or around Vietnam. In a sample of 1,636 Vietnam veterans, 1,264 reported that they knew an American killed in Vietnam, and 860 reported they lost a close friend. Those that lost a close friend reported significantly higher symptoms, which resemble the clinical picture of CG, t(1,616) = 4.41, P < .001, and PTSD symptoms, t(1,630) = 6.40, P < .001. Additionally, the risk for CG increased as the number of close friends killed increased (r = .23, P < .001). Among the 860 who lost a close friend, those that reported lifetime diagnosis of depression reported higher levels of CG, t(848) = 9.46, P < .001, and friends killed, t(520) = 3.37, P < .01.

In a study of Israeli war veterans from the Yom Kippur war, Neria and colleagues described the role of traumatic loss in long term adjustment problems of Israeli war veterans and prisoners of wars, 44-46 suggesting that exposure to loss is strongly related to a wide range of grief-like psychopathology (eg, depressive symptoms, anger, guilt) even 2 decades after the war. 16,17 These studies are consistent with reports among civil-

ians suggesting that loss by malicious violence is one of the most pernicious human experiences.^{4,47,48}

Military culture and the degree of cohesion of peers within units play a crucial



Because the military setting is highly relational, losing a close friend or a leader may result in grief reactions that interfere with military duties and long-term functioning.

role in functioning and well-being during and after deployment. Studies have also repeatedly documented the buffering role of positive social support during and after exposure to combat in development of mental health problems.49 When loss occurs, its impact produces not only continued psychiatric impairment (for some), but a downward spiral of lost social resources. Because the military setting is highly relational, losing a close friend or a leader may result in grief reactions that interfere with military duties and long term functioning.16 Indeed, research indicates that the intensity and level of interrelatedness in relationships within military units have the defining characteristics of attachment relationships.50 Thus, one might draw two conclusions from the literature reviewed in

this paper. First, that CG a critically underrecognized and unaddressed issue in service members. Second, that service members with attachment difficulties or those who feel unprepared for the loss are at heightened risk of CG especially given the violent nature of the loss, potential disruptions of unit cohesion from the need to integrate less experienced replacement personnel, and loss of important social support resources.

IMPLICATIONS FOR TREATMENT

Clearly, the awareness of the dual burden of loss and trauma on war veterans is only now beginning to be understood. There exist an urgent need to consider the unique impact of the death of close comrades on mental health, cohesion, and social support in military personnel. Although there is broad consensus that there is a strong need for empirically supported treatments for CG,51 and significant recent efforts to meet this need in civilian populations (see Shear et al, page 662), there is perhaps an equally urgent need for secondary prevention interventions for those most at risk for developing CG in general,52 and in war veterans, in particular, given the numbers of veterans who have participated and continue to participate in the conflicts in Iraq and Afghanistan. Currently, there is no empirically supported treatment available for war veterans available of any kind.

In this absence, the existing literature provides some general guidelines for those professionals currently treating veterans who have experienced loss. For established cases of CG in war veterans, we recommend that providers adapt existing treatments developed for civilian population such as those of Katherine Shear and colleagues⁵³ and Paul Boelen and colleagues.⁵⁴ For those at high risk for CG but have not developed CG (ie, those showing loss-related impairment that significantly disrupts functioning), we recommend focusing efforts on well

established cognitive-behavioral strategies for mood disorders to promote stable, active routines, self-care, accommodation of loss, enhanced self-efficacy, reengagement in meaningful activities, and reattachment with significant others.

FUTURE CONSIDERATIONS

It is only in the last 10 years that the unique contribution of CG in predicting functional impairment after a loss has been recognized, and only recently have the synergistic effects of the experience of both CG and PTSD been empirically explored. As a result, the development and testing of appropriate interventions has only now begun. However, the bulk of this work has been done with civilian populations. There is an exigent need to recognize the potential dual burden of loss and trauma that a large number of service members may bear as a result of military actions in Iraq and Afghanistan, and to increase efforts in developing and validating CG treatments for war veterans in order to provide mental health providers empirical guidance to address this need.

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